

**Explaining voice behaviour: The roles of personal resources, social interdependence,  
and supervisor leadership style**

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## **Abstract**

This study contributes to current research on voice behaviour by investigating several under-explored drivers that motivate employees' expression of constructive ideas about work-related issues. It draws from the concept of psychological climate to examine how voice behaviour is influenced by employees' (1) personal resources (tenacity and passion for work), (2) perceptions of social interdependence (task and outcome interdependence), and (3) supervisor leadership style (transformational and transactional). Using a multi-source research design, surveys were administered to 226 employees and to 24 supervisors at a Canadian-based not-for-profit organization. The hypotheses are tested with hierarchical regression analysis. The results indicate that employees are more likely to engage in voice behaviour to the extent that they exhibit higher levels of passion for work. Further, their voice behaviour is lower to the extent that their supervisor adopts a transformational leadership style characterized by high performance expectations or a transactional leadership style based on contingent rewards and contingent punishment behaviours. The study reveals that there are no significant effects of tenacity, social interdependence, and behaviour-focused transformational leadership on voice. The findings have significant implications for organizations that seek to encourage employee behaviours that help improve current work practices or undo harmful situations.

**Keywords:** voice behaviour, personal resources, social interdependence, leadership style

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## Table of contents

1. Introduction.....	1
2. Literature review.....	7
2.1. Employee voice.....	7
2.1.1. Conceptualization of voice behaviour .....	7
2.1.2. Outcomes of voice behaviour .....	9
2.1.3. Antecedents of voice behaviour.....	11
2.1.3.1. Employee characteristics .....	11
2.1.3.2. Work context characteristics.....	13
2.1.3.3. Supervisor characteristics .....	14
2.2. Psychological climate and its underlying dimensions .....	16
2.2.1. Personal resources.....	17
2.2.2. Social interdependence .....	18
2.2.3. Supervisor leadership style .....	20
3. Hypotheses.....	23
3.1. Personal resources and voice .....	23
3.1.1. Tenacity and voice .....	23
3.1.2. Passion for work and voice.....	25
3.2. Social interdependence and voice .....	26
3.2.1. Task interdependence and voice .....	26
3.2.2. Outcome interdependence and voice .....	28
3.3. Leadership style and voice.....	29
3.3.1. Transformational leadership and voice.....	29

3.3.2. Transactional leadership and voice .....	31
4. Methodology .....	33
4.1. Data collection .....	33
4.2. Measures .....	35
4.3. Assessment of measures .....	39
4.4. Analytical procedure .....	40
4.5. Results.....	41
5. Discussion .....	43
5.1. Discussion of findings.....	43
5.2. Limitations and future research .....	48
5.3. Practical implications.....	50
5.4 Conclusion .....	52
References.....	53
Figure 1: Conceptual framework .....	67
Table 1: Constructs and measurement items .....	68
Table 2: Test for discriminant validity.....	70
Table 3: Descriptive statistics and correlations .....	72
Table 4: Regression results .....	73

## **1. Introduction**

Effective organizational functioning requires dedicated efforts and input of individual employees. There are many ways in which employees can help their organizations to advance. One of them is through employee participation in voice behaviours. Voice refers to employees' expression of their constructive ideas about work-related issues (Van Dyne, Ang, & Botero, 2003), which includes, but is not limited to, concerns regarding business operations, task practices, and organizational functioning (Venkataramani & Tangirala, 2010). It can yield various positive outcomes, including improvements of work processes (Argyris & Schon, 1978), organizational learning (Edmondson, 1999), and the prevention of potential crises (Schwartz & Wald, 2003). Recent research has distinguished between two types of voice behaviour: promotive voice and prohibitive voice. Promotive voice involves sharing suggestions to improve current work practices or procedures; prohibitive voice, in contrast, focuses on undoing harmful situations (Liang, Farh, & Farh, 2012). In this thesis, I seek to investigate various under-explored drivers of these two voice behaviours.

Researchers have shown steady interest in investigating the antecedents of employees' voice behaviours because such behaviours can be instrumental for organizational success. Different perspectives have been used in this field of research. For instance, LePine and Van Dyne (2001) examined the effects of individuals' personality traits on their use of voice. Burris, Detert, and Chiaburu (2008) explored the influence of psychological attachment and detachment on employees' voice as well as the effect of leader-member exchange on followers' voice behaviours. Detert and Burris (2007) tested how managers' openness can encourage subordinates to engage in

improvement-oriented voice. Morrison, Wheeler-Smith, and Kamdar (2011) explored the influence of group voice climate on group members' voice behaviours. In addition to investigating factors that can facilitate voice behaviours, previous research has also considered factors that represent obstacles for employee voice and that subsequently would increase their tendency to remain silent at work (Brinsfield, Edwards, & Greenberg, 2009). For example, Kish-Gephart, Detert, Trevino, and Edmondson (2009) analyzed how biological nature and social forces inform employees' fear to engage in voice behaviour and motivate them to instead stay silent.

Overall, these studies suggest a plethora of factors, ranging from personal characteristics to characteristics of the work context to characteristics of the supervisor that may influence the propensity of voice (Morrison, 2011). In this thesis, I use the concept of 'psychological climate' as a unifying framework to investigate various hitherto under-explored drivers of voice behaviour. Psychological climate reflects employees' perception and interpretation of their organization's internal environment (Brown & Leigh, 1996). It includes three dimensions: psychological availability, psychological meaningfulness, and psychological safety (Kahn, 1990). Psychological availability speaks to the presence of personal resources needed for involvement in work-related tasks (Kahn, 1990). Psychological meaningfulness involves the perception that investments of personal resources are worth the returns, and thus captures the perceived usefulness of work efforts (Li & Tan, 2013). Psychological safety refers to employees' sense of security about undertaking particular actions in the workplace, and hence the extent to which they do not have to fear for negative consequences that might arise from their actions (Kahn, 1990). Mirroring these three dimensions of psychological climate, I



investigate the roles of (1) employees' cognitive and emotional resources (personal resources), (2) their social interdependence in relation to co-workers, and (3) their supervisors' leadership style in shaping voice behaviour. The conceptual links between these three categories of factors and employee voice behaviour respectively reflect the roles of psychological availability, meaningfulness, and safety.

First, personal resources reflect employees' mental availability for voice behaviour. Voice behaviour requires the ability and motivation to think about the different ways in which the current organizational situation can be improved or altered (Morrison, 2011). I consider employees' tenacity and passion for work as two critical personal resources for proposing constructive ideas. Tenacity reflects employees' tendency to maintain high levels of task engagement when working toward a particular goal, even in the presence of severe obstacles (Baum & Locke, 2004). Passion for work refers to the joy that employees experience when investing significant time and energy in their work (Vallerand et al., 2003). The personal resources of tenacity and passion for work may be important for voice behaviours. Voice implies changes to the organization which may cause potential resistance among peers (Liang et al., 2012). Tenacity can be useful to counter such resistance and focus personal energy on expressing constructive ideas (Van Dyne et al., 2003). Furthermore, people who have a strong passion for work tend to invest significant energy in their work and derive strong satisfaction from the positive outcomes that may emerge from their constructive ideas (Vallerand et al., 2003).

Second, social interdependence speaks to the psychological meaningfulness that voice behaviour may generate. I focus on how employees' work is interconnected with that of their organizational peers, and particularly on their perceptions of task and

outcome interdependence (Lin, 2010). Task interdependence refers to the interconnection of task processes and reflects the extent to which employees share common resources when undertaking tasks (Thompson, 1967; Van der Vegt, Emans, & van de Vliert, 1999; Wageman & Baker, 1997). Outcome interdependence captures the extent to which task outcomes are interconnected, and thus the extent to which employees derive personal benefits when others are successful in their work (Thompson, 1967; Van der Vegt et al., 1999). As socialized individuals, employees' decisions on what actions to undertake are influenced by the implications of these actions on their colleagues. As mentioned above, although voice behaviours seek to create benefits for the organization, such behaviours also tend to upset the current situation and hence may meet resistance among coworkers (Van Dyne, Cummings, & McLean Parks, 1995). In turn, I argue that when constructive ideas are expressed in a context where task processes or outcomes are interconnected, employees will likely believe that their ideas are useful for a wider group of stakeholders and hence will believe that the ideas encounter less resistance. Thus, employees' considerations of how other organizational members will support their ideas should inform their propensity to engage in voice behaviours (Brown & Leigh, 1996).

Third, in addition to personal resources and social interdependence, I suggest the critical role played by the leadership style of the idea proponents' supervisors, which speaks to their perceptions of psychological safety (Brown & Leigh, 1996). Supervisor leadership styles should impact employee voice, because typically it is the supervisor who makes the decision on whether to take employees' ideas into consideration for organizational decision-making (Morrison, 2011). Thus, supervisors' anticipated support or resistance of constructive ideas should be an important factor because they often are

the recipients of employees' voice behaviour (Detert & Burris, 2007). I investigate two supervisor leadership styles: transformational leadership and transactional leadership. Transformational leaders tend to inspire employees and improve the quality of their conduct (Burns, 1978) as well as stimulate their creativity and innovative behaviours (Basu & Green, 1997; Yukl, 1989). Transactional leaders stick to existing policies and procedures of the organization and tend to focus on the status quo instead of innovation and change (Bass, 1985; Deci & Ryan, 1987). I expect transformational leadership to have a positive effect on employees' voice behaviour and transactional leadership a negative effect. Voice implies suggesting changes that benefit an organization (Morrison, 2011). Because transformational leaders focus on organizational improvements and follower initiatives, they are likely to endorse followers' constructive ideas, as evidenced in previous research (Detert & Burris, 2007; Liu, Zhu & Yang, 2010; Wang et al., 2011). In contrast, although limited attention has been devoted to the direct relationship between transactional leadership and voice behaviour, I expect transactional leadership would reduce employee voice because of its controlling function and its focus on adhering to current procedures and rules (Nederveen Pieterse et al., 2010).

Taken together, I seek to contribute to the literature of voice behaviour by considering an understudied set of factors in relation to voice behaviour. To this end, I apply the notion of psychological climate (Kahn, 1990) as an organizing framework to explain why some employees are more likely than others to engage in such behaviour. In particular, I acknowledge that the propensity to make suggestions for organizational improvement (promotive voice) or to correct organizational failures (prohibitive voice) stems from (1) the presence of adequate personal resources (which speaks to

psychological availability), (2) the perception that these behaviours are useful for colleagues in the immediate work context (which speaks to psychological meaningfulness), and (3) the provision by the supervisor of a supportive work environment for such behaviour (which speaks to psychological safety). I suggest that these three dimensions of psychological climate are important mechanisms *through* which the proposed antecedents influence voice behaviour. In particular, I examine the following antecedents that have received limited attention as potential drivers of voice behaviour: tenacity and passion for work (two personal resources), task and outcome interdependence (two critical aspects of social interdependence), and supervisors' transformational and transactional leadership (two types of leadership style). Investigating these antecedents is of paramount importance because voice behaviour entails energy-consuming activities, and the expression of voice behaviour cannot be seen in isolation of the perceived usefulness of the activities for other organizational members as well as the perceived appropriateness of the activities as judged by organizational leaders (Morrison, 2011).

This thesis is structured as follows. First, I provide a review of previous literature on voice behaviour, outlining its conceptualization, outcomes, and antecedents. Second, I discuss the notion of psychological climate and its three dimensions, including an explanation of the different underlying variables that I deem relevant for the study of voice behaviour. Third, I develop various hypotheses, predicting why some employees are more likely than others to engage in voice behaviour. Fourth, I provide a description of the data collection and operationalization of the focal constructs. Following the data

analysis, I discuss the results, and highlight the study's limitations, future research directions, and practical implications.

## **2. Literature review**

### *2.1. Employee voice*

#### 2.1.1. Conceptualization of voice behaviour

Voice behaviour has been defined in the literature in various ways. LePine and Van Dyne (1998) have described voice behaviour as behaviour that is not formally required and expresses constructive perspectives with the purpose of making organizational improvements. Similarly, Van Dyne, Ang, and Botero (2003) labelled voice behaviour as a purposeful expression of one's ideas and opinions on potential progress. Other researchers (e.g., Premeaux & Bedeian, 2003; Detert & Burris, 2007; Liang et al., 2012) have defined similar dimensions of voice behaviour, including that planned and voluntary behaviours are intended to benefit the organization. It is noteworthy that voice behaviour has not only been conceptualized in different ways, but the literature includes various constructs—such as issue selling, whistle-blowing, or upward communication—that are related to yet different from voice behaviour (see Morrison [2011] for an overview). In this regard, Morrison (2011) has noted that the term voice behaviour has sometimes been used in a relatively narrow fashion. For example, Rusbult and colleagues (1988) described voice in response to dissatisfaction at work and conceptualized it specifically as the intent to improve dissatisfactory organizational conditions. Similarly, Bies and Shapiro (1988) have focused on the presence of voice in organizations' decision making processes, specifically in relation to concerns about

procedural justice. Finally, contrary to the concept of voice, which reflects the expression of ideas that are beneficial to the organization, the notion of ‘silence’ captures the intent *not* to share any concerns or information about possible organizational improvements or failures (Morrison & Milliken, 2000; Pinder & Harlos, 2001).

In my research, I consider two types of voice behaviour: promotive and prohibitive, a distinction that was recently made by Liang et al. (2012). Whereas promotive voice involves suggestions for improvements of organizational functioning, prohibitive voice captures suggestions that could undo potential harm. Promotive voice may not yield results in the short run, because it usually requires bringing significant changes to the current organizational state, yet it can create a better future for the organization in the long run. Conversely, prohibitive voice focuses on the prevention of incidents or behaviours that may exert potential harm on the organization in the short or long term. It is important to an organization’s functioning because it seeks to resolve organizational problems that have not been previously detected. Notably, the two types of voice are complementary, in that prohibitive voice, for example, could help solve problems that are foundational to any future innovation proposed through promotive voice. Furthermore, the two voice types share a common ground, in that they both necessitate suggestions that ultimately benefit the organization. Moreover, promotive and prohibitive voice are *not* mandatory behaviours in that they are not documented in formal job descriptions: they require employees’ own initiatives to propose ideas for the organization’s good (Liang et al., 2012).

### 2.1.2. Outcomes of voice behaviour

Although the focus of this thesis is on explaining the antecedents of voice behaviour, in this section I provide a brief overview of the outcomes of such behaviour in order to underscore the importance of voice behaviour and hence illustrate the usefulness of studying its antecedents. Previous research has suggested that voice behaviour can be beneficial for the organization in general, for the immediate work group and its members, and for the idea proponents themselves. First, voice behaviour can benefit the organization in various ways. For example, Morrison and Milliken (2000) have indicated that voice behaviour can lead to better organizational decision-making and help to detect errors in organizations. Other researchers have contended that voice behaviour can facilitate organizational learning (Argyris & Schon, 1978) and promote organizational innovation (Nemeth, 1985).

Second, voice behaviour can be helpful for work groups and their members. LePine and Van Dyne (1998) claimed that sharing one's opinions through voice behaviour adds to the success of group decision-making. Similarly, Edmondson (2003) asserted that employee voice can contribute to the successful adoption of new practices within action teams. Voice brings constructive ideas to the workplace, improves day-to-day work conditions, and enhances task efficiency, which are outcomes that can benefit everyone in the workplace (Morrison, 2011). Yet previous research also suggests that because voice behaviour is change-oriented, it can sometimes create conflicts among organizational members (LePine & Van Dyne, 1998), and infuse friction in work groups (Milliken et al., 2003).

Third, in addition to its effects on the organization and other organizational members, voice behaviour also can have effects on the idea proponents themselves. Through their voice behaviour, employees can express their personal viewpoints, which in turn leads to development of positive attitudes toward their workplace (Morrison & Milliken, 2000), and fuels their satisfaction and motivation (Greenberger & Strasser, 1986; Parker, 1993). Further, Van Dyne and LePine's (1998) found that voice behaviour resulted in better extra-role performance. In a similar vein, some studies have shown the negative effect of silence on individual employees. Cortina and Magley (2003) have contended that when employees experience dissatisfaction at work, particularly when they are unequally treated, their subsequent tendency to keep silent and not express voice can harm them psychologically and physically. Similarly, Vakola and Bourades's (2005) found that silence is negatively associated with job satisfaction and organizational commitment.

Despite its positive outcomes, voice behaviour can also have a negative side for idea proponents because of the stress generated when other organizational members resist the suggested ideas (Van Dyne et al., 1995). Milliken et al. (2003) also argued that voice behaviour may damage the idea proponents' image, in that they may be regarded as troublemakers. Some research has shown that voice behaviour can even lead to lower performance evaluations (Pinder & Harlos, 2001), or delay promotions and pay raises (Siebert, Kraimer, & Crant, 2001). Finally, an important issue for whether voice behaviour is beneficial for idea proponents is linked to whether their supervisors share the same opinions in terms of what constitutes a 'good' idea. Thus, Burris, Detert, and Romney (2013) have found that idea proponents benefit more from their voice behaviour



to the extent that supervisors are convinced that employees' voice behaviour involves high-quality suggestions. In contrast, when employees were believed not to offer valuable constructive ideas, supervisors were inclined to underrate their performance.

### 2.1.3. Antecedents of voice behaviour

Previous research suggests various drivers of employee voice behaviour, which can be categorized based on the characteristics of employees (idea proponents), the work context, and the supervisor. In the following sections, I provide a summary of a few key studies, with the goal of explaining the rationale that was developed in these studies rather than providing a comprehensive overview of the literature on this topic (see Morrison [2011] for a more complete review).

#### 2.1.3.1. Employee characteristics

LePine and Van Dyne (2001) have investigated the effects of employees' personality traits on voice, using the Big Five personality dimensions of conscientiousness, extraversion, openness, agreeableness, and neuroticism (McCrae & John, 1992). They contended that conscientiousness is positively related to voice behaviour, because such behaviour requires that people feel a strong responsibility to extend significant efforts when undertaking work tasks. Further, voice behaviour involves risk-taking as it attempts to change the status quo (Detert & Edmondson, 2011); people who are extraverts are considered to be sociable and assertive, and thus are less inhibited by conformity pressures and more willing to express their ideas for change. Openness was also expected to be positively associated with voice behaviour because people who

score high on openness tend to be imaginative and willing to consider different perspectives to improve the current organizational situation. In contrast, the authors expected that agreeableness was negatively correlated with voice behaviour, as people who are agreeable tend to value conformity which runs against the likelihood to put forth change-oriented ideas. Furthermore, neurotic people were also predicted to be less likely to engage in voice behaviour, because they tend to feel insecure, anxious or embarrassed when they speak up and express their opinions. The findings by LePine and Van Dyne (2001) provided empirical support for these expectations, except that no significant effect was found for openness.

Another interesting study discussed the role of employees' passive and proactive propensities in relation to voice (Van Dyne et al., 2003). The authors claimed that if employees are passive in the workplace, they tend not to be very engaged in issues regarding their organization's development, nor do they actively communicate their opinions with colleagues. They labelled such passive silence as acquiescent silence, which indicates the tendency to withhold one's perspective. In contrast to acquiescent silence, passive employees may also engage in acquiescent voice, which reflects the expression of agreement with ideas being discussed in the group, but without questioning these ideas; acquiescent voice may be fuelled by the presence of low self-efficacy. In terms of the effect of proactive propensity, the authors distinguished between two sub-categories: self-protective and other-oriented. The self-protective motive emphasizes that people's reactions to constructive ideas are driven by their fear of the consequences of wrong ideas (Pinder & Harlos, 2001). There are two types of behaviours that can cause the self-protective motive: defensive silence and defensive voice. Defensive silence

indicates people's intentional silence for fear of the negative consequences of voice, which is proactive and different from the aforementioned passive acquiescent silence (Van Dyne et al., 2003). By the same token, defensive voice emerges when people speak up to protect themselves against the negative impacts of being silent. Finally, the other-oriented motive describes the tendency of people to cooperate with group members. When people possess a cooperative motive, their silence and voice are defined as prosocial silence and prosocial voice, respectively, whereby both have the purpose of bringing benefits to others. In contrast to defensive silence and defensive voice, which are driven by self-protection, prosocial silence and prosocial voice are motivated by altruism (Van Dyne et al., 2003).

#### 2.1.3.2. Work context characteristics

In addition to individual characteristics, previous research has also suggested the important role played by the employees' work context in influencing their voice behaviour. Morrison, Wheeler-Smith, and Kamdar (2011) analyzed the influence of group climate on employees' voice. Group climate reflects people's collective values and opinions about what behaviours to engage in (Kuenzi & Schminke, 2009). It influences employee voice behaviour because the decision to engage in such behaviour creates uncertainty (LePine & Van Dyne, 1998). Employees are inclined to rely on the shared beliefs of their group when undertaking behaviours that entail uncertainty (Cialdini, 2001). Thus, Morrison et al. (2011) contended that employees are more likely to speak up when they believe that their work group favours constructive ideas.

Also relevant is Tangirala and Ramanujam's (2008) investigation of how procedural justice climate influences employee silence. Procedural justice climate describes a collective mindset in regards to the presence of fair procedures in groups (Naumann & Bennett, 2000). Tangirala and Ramanujam (2008) asserted that in workgroups marked by high levels of procedural justice, employees are more likely to speak up, because they believe that their constructive ideas are recognized and valued (Tyler & Lind, 1992). Furthermore, workgroups that possess a procedural justice climate tend to exhibit positive and open communication (Roberson & Colquitt, 2005), which encourages employees to speak up. A strong procedural justice climate also decreases fear that other colleagues will be negatively affected by voice behaviour. Because voice is changed-oriented and may reveal failures or errors in the organization, it may put the colleagues of idea proponents in a difficult position (Edmondson, 2003), particularly to the extent that the organization tends to blame their employees, instead of the work system in general, for problem situations (Deming, 1986). Thus, employees may purposefully avoid speaking up in order to avoid causing trouble for their coworkers (Edmondson, 1996). However, as Tangirala and Ramanujam (2008) argued, in groups characterized by a strong procedural justice climate, idea proponents are more likely to believe that group members are fairly treated and thus that their constructive ideas will *not* backfire against their colleagues.

#### 2.1.3.3. Supervisor characteristics

Previous research has also underscored the role of supervisors in shaping employees' voice behaviour. For example, Detert and Burris (2007) examined the effect

of change-oriented leadership behaviour (as reflected in transformational leadership and managerial openness) on employee voice. They drew from Edmondson's (2003) research which indicated that employees are more inclined to contribute to group learning by voicing their opinions, when supervisors are open to change. Leaders' openness specifically refers to leaders' tendency to consider change-oriented ideas and eventually accept them, which in turn fuels employees' motivation to speak up (Milliken et al., 2003). Furthermore, such openness implies a sense that there are limited power differences between supervisor and subordinate so that employees perceive fewer risks when they put forward opinions that may upset the current situation (Edmondson, 2003). Detert and Burris (2007) hypothesized and empirically found that supervisors' change-oriented leadership behaviour spurs employees' engagement in voice behaviour.

Whereas some leader behaviours may motivate employees to speak up, others can cause silence among subordinates. For instance, Morrison and Milliken (2000) discussed the role of supervisors' fear of receiving negative feedback from their employees, and how this fear contributes to a group climate of silence. When people receive negative feedback, they are inclined to either avoid or downplay the message, or to criticize the accuracy and trustworthiness of the information source (Ilgen, Fisher, & Taylor, 1979). Thus, previous studies have shown that leaders who receive problem-oriented suggestions from their subordinates may try to refute the suggestions by questioning the legitimacy of employees' information in order to maintain their own power bases (Ilgen et al., 1979; Korsgaard, Roberson, & Rymph, 1998). Ultimately, supervisors' fear of negative feedback may carry over to their employees such that the latter are more likely to remain silent rather than to voice their opinions.

Another reason for why supervisors may cause silence lies in the implicit beliefs that they have about their employees. Morrison and Milliken (2000) have suggested the role of three such beliefs. First, when supervisors believe that employees are self-absorbed and untrustworthy, with the goal of maximizing their personal interests (McGregor, 1960; Williamson, 1996), they will discourage employees from engaging in voice. Second, employee silence may also be higher when supervisors believe that subordinates should obey their commands without question (Glauser, 1984). Thus, hierarchical systems in which supervisors have the unilateral power to control their subordinates may discourage employees to speak up (Argyris, 1991). A third implicit belief that undermines voice, according to Morrison and Milliken (2000), is the need to maintain consensus and avoid disagreements (e.g., Cosier & Schwenk, 1990; Enz & Schwenk, 1991; Nemeth, 1997). Supervisors who hold such beliefs are conducive to employee silence, because speaking up inevitably suggests some disagreement with the status quo.

## *2.2. Psychological climate and its underlying dimensions*

To anchor my theorizing about different hitherto under-explored drivers of voice behaviour, I draw from the concept of psychological climate. Psychological climate refers to how employees perceive and value their organizational environment (Brown & Leigh, 1996). It is essentially an individual rather than organizational attribute (James et al., 1978) that consists of three dimensions: psychological availability, psychological meaningfulness, and psychological safety (Kahn, 1990). Psychological availability refers to the extent to which adequate personal resources are available to employees in order to

engage in particular tasks. Psychological meaningfulness is the extent to which employees' resource investments are perceived to be meaningful in terms of whether the returns on these investments are useful or rewarding. Psychological safety reflects whether employees feel safe when they undertake certain actions, such that they do not have to worry about possible negative repercussions for their actions (Kahn, 1990).

For each of the aforementioned three dimensions, I consider two variables that have received relatively little attention in relation to voice behaviour and that seem highly relevant for explaining such behaviour. First, tenacity and passion for work represent two personal resources that inform employees' intrinsic readiness to engage in voice, and thus speak to the role of psychological availability. Second, task and outcome interdependence capture the extent to which employees' task processes and outcomes are interconnected with those of other organizational members, which has implications for the perceived usefulness of their voice and thus speaks to the role of psychological meaningfulness. Third, transformational and transactional leadership are two supervisor leadership styles that should respectively enhance and diminish the concerns that employees might have about possible negative consequences of their voice behaviours. These leadership styles speak to the role of psychological safety. Each of these variables is briefly discussed in the next subsections.

#### 2.2.1. Personal resources

Personal resources describe how much physical and emotional energy employees have available at a particular moment. I focus on the roles of tenacity and passion for work as two critical personal resources. Tenacity captures a person's perseverance in

their goal-driven actions, even in the presence of significant obstacles or disappointments (Baum & Locke, 2004). It captures the cognitive energy that employees have available to undertake work, and thus the cognitive resources needed to complete a particular task (Russo & Doshier, 1983). Passion for work reflects people's emotional attachment to their work and the joy that they derive from making significant time investments in work (Baum & Locke, 2004; Vallerand et al., 2003). It thus has a strong affective component that reflects the degree of interest and excitement that people experience when undertaking work tasks (Goldberg et al., 2002). Existing literature has not explored how employees' tenacity and passion for work may affect their voice behaviour (Morrison, 2011). Voice behaviour involves changes to the current organizational situation, which requires perseverance and a strong intrinsic motivation. Tenacity and passion for work may help address these issues.

#### 2.2.2. Social interdependence

I also consider two aspects of employees' social interdependence (Lin, 2010): task interdependence and outcome interdependence. Task interdependence refers to the extent to which group members must share resources and ideas with one another for achieving task objectives (Brass, 1985; Kiggundu, 1983; Thompson, 1967). The degree of task interdependence usually increases with task difficulty, because group members tend to need more assistance from each other when completing challenging task goals (Van der Vegt et al., 2000). Previous research has indicated that task interdependence can operate at either the organizational or individual level. Those studying task interdependence at the organizational level (e.g., Campion et al., 1993, 1996; Jehn, 1995; Saavedra et al.,



1993; Slocum & Sims, 1980) have contended that task interdependence is a feature for the group as a whole, whereby group members behave in the same way according to this feature (Van der Vegt et al., 2000). Scholars who consider task interdependence at the individual level (e.g., Brass, 1981, 1985; Kiggundu, 1983; Pearce & Gregersen, 1991) have maintained that task interdependence is a characteristic of each individual group member such that the level of task interdependence may differ across group members (Van der Vegt et al., 2000). I employ the latter approach, in light of my focus on how employees' individual perceptions of task interdependence may influence their judgment of others' support for or resistance to their voice.

Outcome interdependence reflects the extent to which idea proponents benefit from successful goal attainment by coworkers (Van der Vegt et al., 1999). Previous research has suggested two facets of outcome interdependence, based on whether such interdependence is positive or negative (Kelley & Thibaut, 1978). When employees consider that outcome interdependence is positive, they assume that other team members' good performance may help with the accomplishment of their own goals. In contrast, when employees believe outcome interdependence to be negative, they assume that other team members' good performance makes their own performance look less outstanding, which exerts a potential risk to the attainment of their own goals (Van der Vegt et al., 1999). I focus on the role of positive outcome interdependence (labelled hereafter as 'outcome interdependence'), as voice behaviour is typically targeted at creating benefits for the entire organization, rather than to instil negative competition among group members (Morrison, 2011).

Social interdependence may result in various positive outcomes. For example, task interdependence may produce positive interactions among group members (Gersick, 1989), better individual performance, and enhanced team performance (Van der Vegt et al., 1999), as well as the prevention of losses (Steiner, 1972). Similarly, positive outcome interdependence has been found to improve interpersonal interactions among team members, increase concerns about others' opinions and outcomes (Van der Vegt et al., 1999), and yield better productivity (Tjosvold & Wong, 1991). Yet previous research has not considered how both types of interdependence may influence the propensity to express voice (Morrison, 2011). When employees consider voicing their opinions, they consider the impact of these opinions on other organizational members. This impact may be higher to the extent that they believe that task processes and outcomes are strongly correlated among group members.

### 2.2.3. Supervisor leadership style

I also consider the role of supervisor leadership style in shaping employee voice behaviour. The concept of leadership has received wide attention in organizational behaviour literature. Conger (1999) defined a leader as a person who is in a position to direct a group of other people or followers. Similarly, Rowden (2000) claimed that leadership is an individual behaviour that guides group members' activities to achieve a common goal. Jacobs and Jacques (1990) argued that leadership is a process that inspires followers to willingly spend more effort to finish their tasks in order to achieve organizational goals. Similarly, Jacques and Clement (1994) indicated that leadership can be regarded as a process in which the leader directs members of the group toward the

accomplishment of desired task objectives. Although goal attainment is a common theme in leadership research, extant scholarship has suggested different ways in which leaders seek to achieve goal attainment, as reflected in different leadership styles. For instance, authoritarian leaders unilaterally dictate and impose their decisions on followers (Hackman & Johnson, 2009). Democratic leaders share decision-making ideas with other team members (Foster, 2002). Servant leaders endeavour to meet followers' personal needs (Stone, Russell, & Patterson, 2004).

I focus on two leadership styles that are expected to have positive and negative influences, respectively, on employees' intention to engage in voice behaviour: transformational leadership and transactional leadership. The two leadership styles draw from Bass's (1985) leadership model that includes three types of leadership styles: transformational leadership, transactional leadership, and laissez-faire. The latter refers to a leadership style that does *not* provide any specific guidance for how employees ought to undertake tasks (Avolio & Bass, 1995). I focus on the first two leadership styles; this is consistent with previous research that has examined their role in behaviours that entail creativity and innovation (Herrmann & Felfe, 2014; Nederveen Pieterse et al., 2010) and studies that have investigated the link between transformational leadership and employee voice specifically (Detert & Burris, 2007; Liu et al., 2010; Wang et al., 2011).

Transformational leaders seek to inspire and 'transform' followers through measures that are motivational rather than restrictive (Burns, 1978). Consistent with previous research (MacKenzie, Podsakoff, & Rich, 2001; Schmitz, Lee, & Lilien, 2014), I follow the four-dimensional transformational leadership structure that includes a core component, the provision of support, the presence of intellectual stimulation, and a focus

on high performance. First, the core component of transformational leadership behaviour includes the identification of a clear vision for the future, the functioning as an appropriate role model for employees, and the facilitation of follower cooperation toward the achievement of common goals that go beyond individual goals (MacKenzie et al., 2001). Second, transformational leadership is characterized by high levels of individualized support and mentorship, as reflected in the strong consideration of and respect for employee feelings (Bass, 1985; MacKenzie et al., 2001). Third, transformational leaders tend to stimulate followers intellectually by emphasizing creativity (van Knippenberg & Sitkin, 2013) and the pursuit of novel ideas (Kim, 2013). This dimension of transformational leadership thus speaks to the encouragement of employees to rethink the current organizational situation and question basic assumptions about their work (Podsakoff et al., 1996). Fourth, transformational leaders hold high performance expectations of their subordinates, and emphasize that employees should be relentless in their effort to meet these expectations instead of settling for an easy solution (Podsakoff et al., 1990).

In contrast to transformational leadership, transactional leadership focuses on mechanistic policies and procedures to reward or punish followers (Avolio & Bass, 1995; Yukl, 1989). Transactional leaders tend to stick to the status quo rather than to focus on making changes to the current organizational situation (Bass, 1985), and hence they tend to have a negative impact on followers' innovative behaviours (Nederveen Pieterse et al., 2010). I follow previous research (MacKenzie et al., 2001; Schmitz et al., 2014) that has considered contingent rewards and contingent punishment as the two critical dimensions that underlie transactional leadership. The contingent rewards dimension is focused on

rewarding positive outcomes, such as when leaders give positive feedback and recognition to employees who exceed work goals; the contingent punishment dimension is focused on punishing negative outcomes, whereby leaders explicate their disapproval with unsatisfactory work performance and actively monitor employee behaviour to identify poor performance (Avolio, Bass, & Jung, 1999; Bass, 1985, 1999; Yukl, 1999).

The study's conceptual framework and its constitutive hypotheses are summarized in Figure 1. Each of the hypotheses is discussed in the next section. The hypotheses are presented in pairs, reflecting the expected effects of the six antecedents (tenacity, passion for work, task interdependence, outcome interdependence, transformational leadership, and transactional leadership) on both promotive and prohibitive voice behaviour. Because I do not expect a priori any differences in the nature of the effects of these variables on the two voice types, the hypotheses that predict promotive and prohibitive voice are presented together.

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Insert Figure 1 about here  
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### **3. Hypotheses**

#### *3.1. Personal resources and voice*

##### *3.1.1. Tenacity and voice*

I hypothesize a positive relationship between employees' tenacity and engagement in voice behaviour. Tenacity reveals an employee's capability of sustained allocation of personal energy to task accomplishment (Baum & Locke, 2004). Making suggestions about organizational improvements or detecting organization problems requires significant energy from employees (Quinn, Spreitzer, & Lam, 2012). Highly

tenacious people are more likely to have sufficient mental resources to see various pathways to change the current organizational situation, either by expressing ways to improve existing work practices or undoing harmful situations. Tenacity also increases the propensity *not* to give up when constructive ideas are met with scepticism (Baum & Locke, 2004). Because voice behaviours inevitably cause change, whether they entail improvements or avoidance of errors (Van Dyne et al., 2003), they often encounter resistance from other organizational members who may feel threatened by the changes. Employees who have high levels of tenacity are more likely to persevere and speak up about their ideas even if they encounter such resistance (Baum & Locke, 2004). Thus, employees are more likely to engage in voice behaviour to the extent that their tenacity protects them against the tendency to give up in the face of organizational resistance.

Conversely, employees who score low on tenacity are less able to cope with the difficulties that come with voicing their opinions about how the current organizational situation can be improved or organizational failures can be corrected. In particular, employees who lack perseverance are more likely to focus on the easier tasks that come with their job (Quinn, Spreitzer, & Lam, 2012) rather than to spend significant efforts in considering potential organizational improvements or undoing unfavourable situations. For example, when colleagues express disagreement with their constructive ideas, idea proponents with lower tenacity are less likely to resist the associated stress and pressure (Van Dyne et al., 1995) and thus may end up *not* voicing their future ideas at all. In short, tenacity bestows employees with the energy that is needed to identify constructive ideas and to persevere with pursuing these ideas in the presence of possible organizational resistance.

*Hypothesis 1a-b: There is a positive relationship between employees' tenacity and their engagement in (a) promotive and (b) prohibitive voice.*

### 3.1.2. Passion for work and voice

Passion for work reflects the personal enjoyment that employees derive from working hard and being successful at work (Vallerand et al., 2003). Because people with a passion for work have a strong motivation to successfully accomplish their tasks (Csikszentmihalyi, Rathunde, & Whalen, 1993), they should exhibit a high propensity to express constructive ideas that help their organization. In other words, passion for work should promote voice behaviour because it increases the personal satisfaction that employees derive from engaging in such behaviour. Moreover, people who are passionate for work also tend to invest significant time and effort in their tasks (Emmons, 1999). With such heightened task involvement, passionate people should have a greater ability to recognize opportunities for organizational improvements or undoing harmful situations (Liang et al., 2012).

In contrast, people with a limited passion for work should have a lower propensity to voice their opinions and suggest constructive ideas. When employees have a lower passion for work and are not enthused by their jobs, they tend to passively undertake job tasks (Baum & Locke, 2004; Vallerand et al., 2003). In this case, employees are more likely to be indifferent to how the current organizational situation can be improved and less likely to take the risk that their ideas would not be accepted by other organizational members. Furthermore, people who are not very passionate about their work have a

harder time finishing their regular work (Ho, Wong, & Lee, 2011) and therefore may have less residual energy for identifying opportunities to improve the organization or correct problem situations. In short, because passion for work provides employees with the increased motivation and capability to express constructive ideas, I expect that more passionate employees are more likely to engage in voice behaviour compared to their less passionate counterparts.

*Hypothesis 2a-b: There is a positive relationship between employees' passion for work and their engagement in (a) promotive and (b) prohibitive voice.*

### *3.2. Social interdependence and voice*

#### *3.2.1. Task interdependence and voice*

When people suggest constructive ideas, they usually think of the benefits as well as the drawbacks that may result from these ideas (Morrison, 2011); this speaks to the perceived usefulness of their voice behaviour (Kahn, 1990). Thus, when employees feel that their voice behaviours are meaningful and useful to others, they should become more strongly inclined to undertake such behaviours. In particular, constructive ideas should be perceived to be more meaningful when these ideas can make improvements to current task processes from which *many* colleagues can benefit. Therefore, when task interdependence is high, constructive ideas will be perceived as being useful to a wider set of beneficiaries, and idea proponents will be more likely speak up (May, Gilson, & Harter, 2004). Furthermore, in the presence of interdependent tasks, it is more likely that other organizational members will actively support an idea proponent's constructive ideas,



rather than to oppose them; this fuels idea proponents' motivation to go out their way to express their opinion. In other words, when group tasks are interconnected, there is a greater likelihood that idea proponents are willing to express their constructive ideas because they anticipate that their colleagues will be strongly aware of how the ideas can benefit themselves.

Conversely, when task interdependence is low, the anticipated usefulness of constructive ideas for other organizational members is lower, and hence idea proponents may fear that their colleagues will be resistant to supporting ideas that may alter the current status quo or even undermine it (Van Dyne et al., 1995). In these circumstances, employees would be less inclined to voice their opinions about making organizational improvements or undoing organizational failures. Moreover, previous research suggests that lower levels of task interdependence diminish the extent of knowledge sharing among group members (Cabrera & Cabrera, 2005), which in turn should reduce the likelihood that employees can learn from others in terms of how to make organizational improvements and find solutions to organizational problems. Thus, when task interdependence is low, the resulting lower occurrence of knowledge sharing diminishes possible *insights* among employees into how the current organizational situation can be improved or how organizational problems can be avoided, such that their engagement in voice behaviour is lower.

*Hypothesis 3a-b: There is a positive relationship between employees' perceptions of task interdependence and their engagement in (a) promotive and (b) prohibitive voice.*

### 3.2.2. Outcome interdependence and voice

Similarly, I hypothesize that when employees believe that their task *outcomes* are positively related with those of other organizational members, they should attribute more meaningfulness to their constructive ideas (Van der Vegt et al., 1999), which in turn should increase their likelihood to engage in voice behaviour (May, Gilson, & Harter, 2004). Furthermore, high levels of outcome interdependence imply that employees will receive less resistance for their constructive ideas from colleagues, even if these ideas may upset their current privileges, and employees will be more motivated to share their suggestions (Van Dyne et al., 1995). When task outcomes are interdependent, there is a greater possibility that other organizational members will support a constructive idea, because they can benefit from the idea directly. In turn, idea proponents will be more motivated to voice their ideas, as they anticipate more support than resistance from colleagues (Milliken et al., 2003).

In contrast, when task outcomes are not interconnected, idea proponents will anticipate stronger resistance for their ideas, because their colleagues are less likely to experience direct benefits from the ideas. As a result, idea proponents will be discouraged from speaking up because they anticipate that the idea may cause stress and resistance among colleagues (Li and Tan, 2013; Van Dyne et al., 1995). Moreover, and similar to the case of task interdependence, when outcome interdependence is low, employees are less inclined to engage in intensive knowledge sharing with one another because they believe that they cannot benefit much from each other's knowledge (Cabrera & Cabrera,

2005), which in turn should decrease their *ability* to identify opportunities for organizational improvement or avoidance of organizational problems.

*Hypothesis 4a-b: There is a positive relationship between employees' perceptions of outcome interdependence and their engagement in (a) promotive and (b) prohibitive voice.*

### *3.3. Leadership style and voice*

#### *3.3.1. Transformational leadership and voice*

I hypothesize a positive relationship between supervisor transformational leadership and employee voice, in light of the role that the underlying dimensions of this leadership style (core, performance expectations, intellectual stimulation, and support) play in shaping employee behaviours. The core function of transformational leadership is to articulate a vision that inspires subordinates to give stronger weight to group goals than to individual goals, including making improvements to the current organizational situation (Basu & Green, 1997; MacKenzie et al., 2001). Core transformational leadership should support voice behaviour because employees under this leadership style feel encouraged to express ideas that help achieve collective goals and organizational effectiveness. Moreover, transformational leaders function as role models who strongly influence employees' ways of thinking and doing (Brown & Trevino, 2014; Nederveen Pieterse et al., 2010). Through their focus on the development of the organization, transformational leaders set examples for their subordinates, who may learn from these

examples in terms of how they can contribute to organizational effectiveness by voicing their opinions (Bandura, 1986).

In addition to this ‘core aspect’ of transformational leadership—which focuses on clarity of vision, group goals, and role modeling—transformational leaders should also fuel voice behaviour because they tend to play a strong mentoring role when employees take personal initiatives to change the current organizational situation (Bass, 1985; MacKenzie et al., 2001). In light of the possible resistance that idea proponents may anticipate from their colleagues (Van Dyne et al., 1995), transformational leaders who provide individualized support can stimulate followers to express their ideas and motivate them to persist in voicing their opinions in the face of any resistance that these opinions may invoke. Furthermore, transformational leaders stimulate followers intellectually by urging them to reconsider the basic assumptions that underlie their work and rethink the ways that work is currently done in the organization (Bass, 1985; Podsakoff et al., 1996). This focus on change and upsetting the status quo is instrumental in encouraging voice behaviours (Morrison, 2011). Finally, transformational leaders tend to hold high expectations about their employees’ performances (Podsakoff et al., 1990). This aspect of transformational leadership motivates followers to perform beyond their current performance levels and consequently elevates their work objectives to a higher level (Dvir et al., 2002). Accordingly, when transformational leaders emphasize stellar performance, employees are encouraged to go out of their way to excel in their job tasks and develop ideas that hold significant benefits for the organization.

*Hypothesis 5a-b: There is a positive relationship between supervisors' transformational leadership and employees' engagement in (a) promotive and (b) prohibitive voice.*

### 3.3.2. Transactional leadership and voice

In contrast to transformational leadership, I expect that there is a negative relationship between transactional leadership and employees' engagement in voice behaviour. Transactional leaders tend to express a strong preference that employees do not deviate from existing organizational rules and that they meet pre-set performance standards (Bass, 1985; Yukl, 1999). Because ideas about implementing organizational improvements or correcting organizational failures always require some deviation from the current organizational situation (Liang et al., Morrison, 2011), transactional leadership should be detrimental to employees' voice. Transactional leaders emphasize clear communication about performance standards and go out of their way to provide feedback about whether employees meet these standards (MacKenzie et al., 2001). Previous research suggests that because such a leadership style makes employees strongly aware of their leader's preferences, it discourages them from engaging in behaviours that are innovative and change oriented (Neederveen Pieterse et al., 2010). Similarly, I expect that transactional leadership should discourage employees from expressing constructive ideas because employees perceive this leadership style as controlling and stifling of their opinions. Furthermore, employees are influenced by the role model function fulfilled by their leaders (Brown & Trevino, 2014). Thus, transactional leaders may discourage followers from engaging in voice behaviour by

transferring their personal values with respect to refraining from organizational changes to their followers (Neederveen Pieterse et al., 2010).

In this thesis, I particularly focus on transactional leaders' reliance on contingent rewards and contingent punishments to increase the likelihood that followers' behaviours are consistent with current organizational procedures (Schmitz et al., 2014). Whereas the former emphasizes feedback about and recognition of adequate performance, the latter emphasizes disapproval of inferior performance (MacKenzie et al., 2001). I expect that the controlling aspect that marks these two dimensions of transactional leadership will reduce the likelihood that employees will voice their opinions. Voice behaviour is inherently risky and marked by the uncertainty that other organizational members, including the supervisor, may not be open to one's ideas (Morrison, 2011; Van Dyne et al., 1995). Thus, in the presence of transactional leadership, employees may fear that their voice behaviour will prevent them from meeting preset performance standards, which would result in having to forego rewards for positive performance or suffer punishment for negative performance. Overall, because transactional leadership has a strong controlling component and emphasizes the status quo rather than change (Bass, 1985), and voice behaviour always entails some alteration of the current situation (Morrison, 2011), employees should feel less 'safe' to voice their opinions in the presence of transactional leadership (Kahn, 1990).

*Hypothesis 6a-b: There is a negative relationship between supervisors' transactional leadership and employees' engagement in (a) promotive and (b) prohibitive voice.*

## **4. Methodology**

### *4.1. Data collection*

In order to test the hypotheses, data were collected from staff of a Canadian not-for-profit organization in Fall 2014. The organization had recently undergone a significant restructuring and was highly interested in better understanding how its internal functioning could be improved by stimulating employees to provide constructive ideas that increase organizational effectiveness or solve organizational problems. Thus, examining why some employees are more likely than others to engage in promotive and prohibitive voice was highly relevant for this organization. This study received ethics clearance from the organization's research ethics board and was strongly endorsed by its senior management.

A two-respondent research design was utilized, requiring survey-based data collection among employees and their supervisors. The employee and supervisor surveys were pretested with three organizational members who did not participate in the actual data collection. By incorporating their feedback during this pilot phase, the readability of the survey questions was improved. For both surveys, the participants were promised complete confidentiality. Furthermore, it was emphasized that only the researchers had access to their individual responses. Participants were also asked to answer the questions as honestly as possible, were repeatedly assured that there were no right or wrong answers, and were told that it was normal for employees to score the questions differently. The above measures minimized the possibility that the responses would be subject to social desirability or acquiescence biases (Spector, 2006).

The employee survey assessed employees' personal resources (tenacity and passion for work), social interdependence (task and outcome interdependence), and their assessment of their supervisors' leadership style (transformational and transactional leadership). The supervisors assessed their employees' voice behaviour. The employee survey included a personal code that enabled the matching of employee responses with supervisor responses. Employees had two response options: either to complete a paper-and-pencil version of the survey and return it through a pre-paid pre-addressed envelope or to complete an online version of the survey. The supervisors were asked to assess each of the employees who reported to them in a short paper-and-pencil survey, which they returned through a pre-paid pre-addressed envelope.

In total, 599 employee surveys were distributed, of which 20 were returned unanswered because the contact address was incorrect. I received 259 responses, which reflects a response rate of 43%. A comparison of early and late respondents did not reveal any significant differences in terms of the study's focal variables, nor were any significant differences found for these variables when comparing the paper-and-pencil and online responses. Among the employee respondents, 85.5% were female, the average age was 47.5 years, and the average organizational tenure was 15 years. In total, 24 supervisors were contacted and each of them completed an individual assessment of their employees' voice behaviour. Because of the presence of incomplete surveys or the inability to match employee with supervisor responses, the final sample consisted of 226 employee-supervisor pairs.



#### 4.2. Measures

All construct items were drawn from previously validated scales. Items were evaluated on a seven-point Likert scale, ranging from ‘1’ (completely disagree) to ‘7’ (completely agree). Table 1 illustrates the factor loadings and t-values for each item, and the Cronbach alpha, composite reliability, and the average variance extracted for each construct.

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Insert Table 1 about here  
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*Voice behaviour* was assessed by the supervisor by ten items drawn from Liang et al. (2012). Five items described promotive voice: (1) this employee proactively develops and makes suggestions for issues that may influence his/her department/unit, (2) this employee proactively suggests new projects which are beneficial to his/her department/unit, (3) this employee raises suggestions to improve his/her department/unit’s working procedures, (4) this employee proactively voices out constructive suggestions that help his/her department/unit reach its goals, and (5) this employee makes constructive suggestions to improve his/her department/unit’s operation. Five items captured prohibitive voice: (1) this employee advises other colleagues against undesirable behaviours that would hamper job performance, (2) this employee speaks up honestly about problems that might cause serious loss to his/her department/unit, even when dissenting opinions exist, (3) this employee dares to voice out opinions on things that might affect efficiency in his/her department/unit, even if that would embarrass others, (4) this employee dares to point out problems when they appear, even if that

would hamper relationships with other colleagues, and (5) this employee proactively reports coordination problems in his/her department/unit to his/her manager/supervisor.

In order to test the discriminant validity of the two voice types, I compared the fit of the unconstrained two-factor model (in which the correlation between the voice types was set free) and the constrained two-factor model (in which this correlation was set equal to one). There was no significant difference in fit between the two models ( $\chi^2_{(1)} = .04, ns$ ), which suggests a lack of discriminant validity (Anderson & Gerbing, 1988). Therefore, I calculated a composite score of employee *voice behaviour* as the average of the ten measurement items (Cronbach alpha = .958).

*Tenacity.* The measure of tenacity included four items drawn from Baum and Locke (2004): (1) I can think of many times when I persisted with work when others quit, (2) I continue to work hard on tasks even when others oppose me, (3) I work harder than most people I know, and (4) I do not give up when confronting challenging work situations (Cronbach alpha = .731).

*Passion for work* was measured with four items based on Baum and Locke (2004): (1) I love to work, (2) I look forward to returning to work when I am away from work, (3) I derive most of my life satisfaction from my work, and (4) I accomplish a lot at work because I love to work (Cronbach alpha = .877).

*Task interdependence.* Following Van der Vegt et al. (2000), task interdependence was measured with five items: (1) my own performance depends on receiving information and advice from my colleagues, (2) I depend on my colleagues' input to do my job, (3) I depend on my colleagues' help and support to do my job, (4) I depend on my colleagues in order to be able to do my work well, and (5) my job

performance is strongly affected by my colleagues' contributions (Cronbach alpha = .906).

*Outcome interdependence* was assessed with four items based on Van der Vegt et al. (2000): (1) it is beneficial for my colleagues when I excel in my work, (2) it is to my colleagues' advantage when I perform well, (3) my colleagues' goals are compatible with mine, and (4) it pleases me when my colleagues excel in their work (Cronbach alpha = .772)

*Transformational leadership.* Consistent with Schmitz and colleagues (2014), I measured transformational leadership by assessing its four underlying dimensions: (1) core transformational leader behaviour, (2) supportive leader behaviour, (3) intellectual stimulation, and (4) high performance expectations. Three items assessed core transformational leader behaviour: (1) my manager/supervisor articulates his/her vision clearly, (2) my manager/supervisor is an ideal role model for employees, and (3) my manager/supervisor facilitates the acceptance of group goals (that go beyond individual ones). Two items assessed supportive leader behaviour: (1) my manager/supervisor always considers my personal feelings before acting, and (2) my manager/supervisor shows respect for my personal feelings. Four items assessed intellectual stimulation: (1) my manager/supervisor challenges me to think about old problems in new ways, (2) my manager/supervisor asks questions that prompt me to think about the way I do things, (3) my manager/supervisor stimulates me to rethink the way I do things, and (4) my manager/supervisor challenges me to re-examine some of my basic assumptions about work. Three items assessed high performance expectations: (1) my manager/supervisor insists on only the best performance, (2) my manager/supervisor will not settle for second

best, and (3) my manager/supervisor makes it clear that s/he expects that I give 110% all the time.

To test for discriminant validity among the four dimensions, I checked whether there were significant differences between the unconstrained and constrained models for all six pairs of dimensions (Anderson & Gerbing, 1988). I found significant differences between the high performance expectations dimension on the one hand, and the core transformational leader behaviour, supportive leader behaviour, and intellectual stimulation dimensions on the other. Therefore, I calculated a composite score for these latter three dimensions, referred to hereafter as *behaviour-focused* transformational leadership (Cronbach alpha = .921), and a composite score of the four items that measure the high performance expectations dimensions, referred to hereafter as *performance-focused* transformational leadership (Cronbach alpha = .810).

*Transactional leadership* was measured by assessing the underlying dimensions of contingent reward behaviour and contingent punishment behaviour (Schmitz and colleagues, 2014). Three items assessed contingent reward behaviour: (1) my manager/supervisor always gives positive feedback when I perform well, (2) my manager/supervisor gives special recognition when I perform well, and (3) my manager/supervisor commends me when I exceed my work goals. Three items assessed contingent punishment behaviour: (1) my manager/supervisor would indicate his/her disapproval if I performed at a low level, (2) my manager/supervisor would point out to me if my performance was not satisfactory, and (3) my manager/supervisor would know about it when I perform poorly. A comparison of the unconstrained and constrained two-factor models indicated the presence of discriminant validity between the two dimensions

( $\chi^2_{(1)} = 40.26, p < .01$ ). Therefore, I calculated separate composite scores for contingent reward behaviour (Cronbach alpha = .951) and contingent punishment behaviour (Cronbach alpha = .848)

*Control variables.* Consistent with previous research (Detert & Burris, 2007; Herrmann & Felfe, 2012; Morrison, 2011; Nederveen Pieterse et al., 2010; Wang et al., 2012), I controlled for the following four employee demographic characteristics: gender, age, education, and organizational tenure. I also controlled for organizational support for change, which was measured with four items adapted from Scott and Bruce's (1994) scale of innovation support: (1) constructive ideas are encouraged in my department/unit, (2) my department/unit is open to having its people come up with new suggestions, (3) my department/unit is responsive to change, and (4) my department/unit can be described as flexible.<sup>1</sup>

#### 4.3. Assessment of measures

Drawing from Anderson and Gerbing (1988), I assessed the reliability and validity of the measures with AMOS 22.0. Each of the constructs had Cronbach alpha's and composite reliabilities higher than .70, which supports their reliability. The results also demonstrate that there was convergent validity of the main constructs: the t-values for all items of each construct exceeded 2.0 threshold (Anderson & Gerbing, 1988), and

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<sup>1</sup> To check for social desirability, I undertook a robustness check using a four-item social desirability control variable, based on Reynolds (1982). A post-hoc analysis indicates that the partial correlations that controlled for social desirability among the study's variables are consistent in sign and significance with the bivariate correlations reported in Table 3, reported hereafter. Further, the regression results (reported in Table 4 and discussed in Section 4.5) are robust to the inclusion of this control variable, which suggests that social desirability should not be a major concern in this study.

each construct's magnitude of average variance extracted (AVE) values were greater than .50, except that the AVE for tenacity equalled .42 (Bagozzi & Yi, 1988) (Table 1).

Table 2 indicates that there were significant differences between the unconstrained and the constrained models of each pair of constructs that are listed in Table 1 (Anderson & Gerbing, 1988), except for the pair that includes behaviour-focused transformational leadership and transactional leadership based on contingent rewards. Because these two variables have different conceptual meanings, they were not combined into one construct (MacKenzie et al., 2001). Furthermore, the alternative approach to test for discriminant validity—which compares the AVE values of each construct with the squared correlations of the corresponding construct pairs (Fornell & Larcker, 1981)—indicates that the AVE values of all constructs were larger than the squared correlations between the pairs (including the aforementioned pair of behaviour-focused transformational leadership and transactional leadership based on contingent rewards) suggesting the presence of discriminant validity among each of the constructs. Table 3 shows the study's variables' bivariate correlations and descriptive statistics.

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Insert Table 2 and 3 about here  
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#### *4.4. Analytical procedure*

The hypotheses are tested with hierarchical regression analysis (Aiken & West, 1991; Cohen & Cohen, 1983): Model 1 includes the control variables, and Model 2 adds the focal constructs. Both models predict the comprehensive ten-item measure of voice ('voice in general'). To investigate whether there might be differing influences of the independent variables on the two types of voice behaviour (despite their limited

discriminant validity, see Section 4.2), Model 3 and 4 predict promotive voice and prohibitive voice, respectively. A calculation of the interrater agreement and interclass correlation coefficients for the focal constructs indicated that multi-level analyses were not appropriate for this study.

#### 4.5. Results

Table 4 shows the results of the regression analysis. Model 1 indicates that voice behaviour is higher among employees who are older and more educated, and among employees who perceive that the organizational climate is more supportive for change. Hypotheses 1a and 1b argue that there is a positive relationship between employees' tenacity and promotive/prohibitive voice. I found no evidence for such positive relationship when predicting voice in general ( $\beta=.066$ , *ns*), promotive voice ( $\beta=.058$ , *ns*) or prohibitive voice ( $\beta=.073$ , *ns*). Hence, both hypotheses are not supported. Hypotheses 2a and 2b predict a positive relationship between employees' passion for work and promotive/prohibitive voice. The results indicate a positive relationship of passion for work with voice in general ( $\beta=.165$ ,  $p < .05$ ), promotive voice ( $\beta=.169$ ,  $p < .05$ ) and prohibitive voice ( $\beta=.161$ ,  $p < .05$ ). Thus, both hypotheses are supported.

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Insert Table 4 about here  
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Hypotheses 3a and 3b state that there is a positive relationship between employees' perceptions of task interdependence and their promotive/prohibitive voice. This relationship was found to be not significant when predicting voice in general, promotive voice or prohibitive voice ( $\beta = -.014$ , *ns*;  $\beta = -.056$ , *ns*;  $\beta = .027$ , *ns*,

respectively), which indicates no support for Hypothesis 3a and 3b. In Hypotheses 4a and 4b, I postulated a positive relationship between employees' perceptions of outcome interdependence and their promotive/prohibitive voice. Similar to the case of task interdependence, Models 2–4 did not reveal significant effects of outcome interdependence on voice in general, promotive voice, or prohibitive voice ( $\beta = -.006$ , *ns*;  $\beta = .049$ , *ns*;  $\beta = -.062$ , *ns*).

In terms of the role of leadership, Hypotheses 5a and 5b predict a positive relationship between transformational leadership and promotive/prohibitive voice. As mentioned in the Section 4.2, CFA indicates the presence of two distinct facets of transformational leadership: behaviour-focused transformational leadership (which entails the dimensions of core transformational leader behaviour, supportive leader behaviour, and intellectual stimulation) and performance-focused transformational leadership (which entails the dimension of high performance expectations). Behaviour-focused transformational leadership does not have a significant relationship with voice in general ( $\beta = .062$ , *ns*), promotive voice ( $\beta = .043$ , *ns*) or prohibitive voice ( $\beta = .080$ , *ns*). Further, performance-focused transformational leadership has a negative, instead of positive, relationship with voice in general ( $\beta = -.133$ ,  $p < .05$ ), promotive voice ( $\beta = -.136$ ,  $p < .10$ ) or prohibitive voice ( $\beta = -.130$ ,  $p < .10$ ). Thus, there is a counter-finding for Hypotheses 5a and 5b in terms of the *negative* role of transformational leaders' high performance expectations in the prediction of voice behaviour.

Hypotheses 6a and 6b suggest a negative relationship between transactional leadership and promotive/prohibitive voice. The CFA in Section 4.2 indicates that it was meaningful to distinguish between the dimensions of contingent reward behaviour and



contingent punishment behaviour. The results in Table 4 show that both transactional leadership dimensions have negative relationships with voice behaviour, although the relationships are stronger for prohibitive than promotive voice. In particular, there is a weak negative relationship of contingent reward behaviour with voice in general ( $\beta = -.091, p < .10$ ), a negative relationship with prohibitive voice ( $\beta = -.118, p < .05$ ), and no relationship with promotive voice ( $\beta = -.063, ns$ ). Furthermore, there is a negative relationship of contingent punishment behaviour with voice in general ( $\beta = -.161, p < .05$ ), promotive voice ( $\beta = -.153, p < .05$ ) and prohibitive voice ( $\beta = -.169, p < .05$ ). Overall, these findings provide partial support for Hypotheses 6a and 6b.

## **5. Discussion**

### *5.1. Discussion of findings*

In this thesis, I sought to explain why some employees are more likely than others to engage in voice behaviour. Previous research suggests that employees' voice is influenced by individual, work context, and supervisor characteristics (Morrison, 2011). I used the concept of psychological climate as an organizing framework to investigate several under-explored drivers of voice behaviour. In particular, the three dimensions of psychological climate—psychological availability, psychological meaningfulness, and psychological safety (Kahn, 1990)—were proposed to explain the conceptual links between voice and three sets of factors: employees' personal resources, their social interdependence with their colleagues, and their supervisors' leadership style. The study's results provide a nuanced picture of the relative importance of these individual, work context, and leadership style characteristics in the explanation of employee voice.

Furthermore, although the study's hypotheses made a distinction between two types of voice (promotive and prohibitive), the results indicate a strong positive correlation, and lack of discriminant validity, between these two voice types. Hence, the discussion below focuses mostly on the results as they relate to the prediction of voice in general.

I hypothesized a positive relationship between tenacity and voice behaviour. Because employees with high tenacity are more likely to have adequate mental energy to analyze the current organizational situation (Baum & Locke, 2004), they should have greater abilities to recognize potential opportunities and suggest constructive ideas. Moreover, tenacious people tend to not easily give up on their intentions in the presence of resistance (Baum & Locke, 2004). Idea proponents may be met with resistance when they engage in voice behaviour, because such behaviour often implies organizational changes that can be perceived by other organizational members as threats to their own standing in the organization. Although I found a positive correlation between tenacity and voice ( $r = .190, p < .01$ , Table 3), the regression results did not provide support for the positive effects of tenacity on voice when accounting for the roles of the other variables. One possible explanation for the lack of a positive effect of tenacity may be that other factors (i.e. passion for work and certain leadership styles) are more important and 'over-power' the role that tenacity plays in the likelihood that employees voice their opinions. Another reason could be that the positive effect of tenacity is outweighed by a tendency of tenacious people to be over-anxious when it comes to meeting current job expectations (Quinn et al., 2012), such that the associated stress turns them away from engaging in energy-consuming voice behaviours. Yet another explanation is that the measure of tenacity captures employees' mere access to personal resources, and in particular the

tendency to be persistent in achieving their goals, rather than their willingness or readiness to exploit these resources toward constructive idea generation. Thus, to the extent that employees believe that their voice behaviour could harm the accomplishment of their goals, their tenacity may turn them away from such behaviour, which in turn could balance out the hypothesized positive relationship between tenacity and voice.

I found strong support for the hypothesis that passion for work enhances voice behaviour. Passionate people have a high propensity to voice their opinions because they derive joy and personal satisfaction from suggesting constructive ideas that contribute to the well-being of their organization (Vallerand et al., 2003). Passion for work also facilitates voice behaviour because employees with higher levels of passion tend to be more energetic and more strongly involved in their work tasks (Emmons, 1999; Ho et al., 2011). Hence, employees who are more passionate about work are more likely to voice their opinions about how organizational improvements can be achieved or organizational errors corrected.

I also expected that the two types of social interdependence, task and outcome interdependence, would have a positive impact on voice. The rationale was that when idea proponents realize that their constructive ideas can benefit a wider set of interdependent people—which implies a higher level of idea meaningfulness (Kahn, 1990)—they are more likely to express these ideas. Thus, when task processes or outcomes are interdependent, constructive ideas are useful for multiple beneficiaries, and idea proponents should exhibit a higher propensity to speak up. Furthermore, the hypothesized positive effect of both interdependence types was also informed by the enhanced support that co-workers may provide for ideas that are beneficial to themselves

(Van Dyne et al., 1995) as well as by the higher level of knowledge sharing among interdependent group members and hence lead to the increased *ability* to suggest constructive ideas (Cabrera & Cabrera, 2005). However, the results did not provide empirical evidence for the presence of positive roles by task and outcome interdependence. One possible reason for these non-effects is that employees may believe that the improvements that come with their constructive ideas will take a long time to implement before having an actual effect on the organization, such that the perceived meaningfulness of their voice is mitigated. Another explanation could be that the effects of task and outcome interdependence are suppressed by the omission of other relevant variables, such as the quality or radicalness of the proposed ideas. Moreover, the lack of a significant effect may also indicate that the positive role of enhanced meaningfulness and peer support is countered by the expectation that organizational peers will *resist* constructive ideas because of the significant changes that these ideas may invoke in interdependent work settings (Liang et al., 2012). Thus, to the extent that employees fear that other organizational members, whose tasks and outcomes are highly interdependent with their own, will exhibit strong resistance to their voice behaviours, the perceived usefulness of such behaviours will be neutralized.

I further expected that employees' voice would increase to the extent that their supervisors adopted a transformational leadership style. Core transformational leadership focuses on followers' personal development, the achievement of group goals, and the improvement of organizational effectiveness (MacKenzie et al., 2001; Schmitz et al., 2014). Furthermore, this leadership style includes the provision of strong individualized support to followers, the intellectual stimulation of followers to reconsider the

organization's status quo, and high expectations that followers elevate their current performance levels (MacKenzie et al., 2001; Schmitz et al., 2014). The results reveal the presence of two distinct aspects of transformational leadership: behaviour-focused and performance-focused. I found that *behaviour-focused* transformational leadership (which encompasses the dimensions of core transformational leadership, provision of support, and intellectual stimulation) did not have a significant effect on voice. A possible explanation is that transformational leaders may fail to clearly articulate how their vision, support, and intellectual stimulation can speak specifically to behaviours that entail change and organizational improvements. Thus, to the extent that the communication and guidance associated with behaviour-focused transformational leadership is too general, it may not have an actual impact on voice (Ketokivi & Castañer, 2004). Another possibility is that employees may become overwhelmed, and perhaps over-burdened, by leaders who focus very strongly on communicating their vision, providing personal support, and rethinking the way things are currently done, such that the 'psychological safety' associated with these leader behaviours is balanced out by enhanced anxiety and risk avoidance.

This study also reveals an interesting counter-finding in that *performance-focused* transformational leadership (which encompasses the dimension of high performance expectations) was negatively, rather than positively, related to voice. A possible explanation is that a strong leadership focus on stellar performance and exceeding oneself invokes negative stress in employees (Quinn et al., 2012) such that their propensity to voice their opinions is hindered. High performance expectations may also shift employees toward an extrinsic motivational focus, which in turn diminishes their self-

determination and propensity to engage in voice (Ryan & Deci, 2000). Furthermore, if employees believe that there is high uncertainty in terms of whether their opinions will contribute to, rather than diminish, organizational well-being (Liang et al., 2012; Morrison, 2011), they may fear that their voice behaviours will not meet the high performance expectations set by their leader and therefore may shy away from such behaviours. Yet another explanation for the negative relationship between performance-focused transformational leadership and voice could be that leaders who emphasize stellar performance have been able to ensure strong performance within their unit and employees therefore see less need to engage in voice behaviour to make improvements.

Finally, I found that both components of transactional leadership, contingent reward and punishment, have negative relationships with voice behaviour, consistent with theoretical expectations. These components of transactional leadership are controlling type of measures, which employees may perceive as burdens that undermine their psychological safety (Kahn, 1990). When exposed to such leadership, employees become so concerned about whether they are able to meet preset performance standards that their creativity is stifled and they are less likely to think outside the box (Neederveen Pieterse et al., 2010).

## *5.2. Limitations and future research*

This study possesses a few limitations which future research may address. First, although I investigated how personal resources, social interdependence, and supervisor leadership style influence employee voice behaviour, there may also be reverse causality for some of these relationships. For example, when people are able to successfully voice

their opinions, they may become more tenacious when facing drawbacks or start to derive more joy from their work (Greenberger & Strasser, 1986; Parker, 1993). Moreover, voice behaviours may create additional insights among idea proponents in terms of how the nature of group task processes and outcomes are interdependent, as well as make them more aware of the nature and effectiveness of their supervisors' leadership styles. Future studies could apply longitudinal designs to reveal the long-term causal processes that link employees' personal resources, social interdependence, and supervisor leadership style with their engagement in voice behaviours.

Second, and in a related nature, I did not directly measure the causal mechanisms that underlie the hypothesized relationships. I used the concept of 'psychological climate' as a link between the independent variables and voice. Specifically, I theorized the following causal mechanisms: (1) psychological availability that speaks to the personal resources needed to engage in voice (tenacity and passion for work), (2) psychological meaningfulness that relates to the perception that voice is useful (task and outcome interdependence), and (3) psychological safety that reflects employees' perceptions that their supervisor creates an environment that is secure for expressing their opinions (supervisor leadership style) (Kahn, 1990). Future research could measure these causal mechanisms directly, and test whether these mechanisms represent full versus partial mediation effects. These analyses could also shed further light on some of the non-findings of this study and establish whether there may be alternative mechanisms, different from the ones studied herein, through which the study's focal variables influence voice. For example, and as mentioned in section 5.1, it could be that the relationship between tenacity and voice behaviour is not mediated by employees' mere

access to this personal resource but by their psychological readiness to exploit this resource toward such behaviour. Another avenue of future research would be to examine how some of the focal variables that speak to psychological climate (e.g., personal resources or leadership style) may themselves function as mediating mechanisms through which perceptions of the internal organizational environment (e.g., organizational support for change) influence voice.

Third, the study did not theorize about the possible interaction effects among the study's focal variables. Future research could investigate, for example, how the propensity to leverage personal resources (such as passion for work) into voice behaviour might be higher to the extent that employees believe that such resource leverage is endorsed by an appropriate leadership style. Furthermore, the perceived usefulness of voice behaviour in interdependent work contexts may depend on the leadership style that is used by supervisors, to the extent that employees believe that their interdependent co-workers are influenced by such leadership styles as well.<sup>2</sup>

### *5.3. Practical implications*

Voice behaviour can greatly benefit individual employees, work groups, and the organization in general (Morrison, 2011), and thus identifying factors that influence such behaviour has significant practical relevance for organizations. The findings of this research suggest that organizations that seek to encourage voice among their employee bases should (1) inspire their employees' intrinsic motivation through enhanced passion

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<sup>2</sup> A post-hoc analysis did not provide support for the presence of interaction effects. This is possibly due to the insufficient statistical power associated with this study's sample.



for work, and (2) avoid focusing solely on high performance expectations or an application of contingent rewards or punishment systems.

Senior management should be aware that employees with a strong passion for work may be more inclined to engage in voice behaviour because successfully voicing their opinions increases their joy and satisfaction in the workplace. Furthermore, passionate people tend to be more involved in their work and therefore have a greater ability to identify opportunities for organizational improvements or errors. The positive role of passion for work in stimulating voice has implications for organizations' training policies that could encourage and develop passion in the workplace (Ho et al., 2011; Vallerand et al., 2003). For example, passion for work could be stimulated by assessing and explicating the personal joy and satisfaction that employees derive from dedicated work efforts. Furthermore, organizations could increase the likelihood that employees exhibit a strong passion for work and encourage voice behaviour by demonstrating that constructive ideas that solve current organizational problems or instil organizational improvements may exist in a wide array of task areas, including those that employees are most interested in on a personal level. Organizations that seek to stimulate voice can also benefit from exposing employees to inspiring role models who communicate the personal joy that they derive from suggesting constructive ideas (Brown & Trevino, 2014).

Organizations should also be aware that leaders who focus on high performance expectations, contingent rewards, or contingent punishment may be perceived as overly controlling, which can shift followers from an intrinsic to an extrinsic motivational focus. Organizational environments marked by high levels of control diminish self-motivation, such that employees are deterred from voicing their opinions about correcting

organizational errors or suggesting organizational improvements. Thus, organizations that seek to stimulate constructive ideas among their employee bases should avoid leadership styles that focus excessively on high performance, and that emphasize rewards and punishment schedules of preset performance standards. Finally, this study shows that behaviour-focused transformational leadership—which focuses on vision, support, and intellectual stimulation—is not a guarantee for enhanced voice behaviour. The lack of a significant effect of such transformational leadership may suggest that follower behaviour in response to transformational leadership is only effective for the encouragement of voice to the extent that transformational leaders are sufficiently clear and specific in their communication of how the suggestion of constructive ideas contributes to followers' personal development and organizational performance.

#### *5.4 Conclusion*

With this research, I have contributed to the literature of voice behaviour by investigating various under-explored drivers of such behaviour, including two personal resources (tenacity and passion for work), two types of social interdependence (task and outcome), and two leadership styles (transformational and transactional). The results indicate that employees with a stronger passion for work are more inclined to engage in voice behaviour. Conversely, performance-focused transformational leadership and contingent reward and contingent punishment, two facets of transactional leadership, tend to diminish employee voice. I hope that this study will lead to further investigations of other factors that may influence employees' propensity to engage in voice behaviour and hence create better workplaces.

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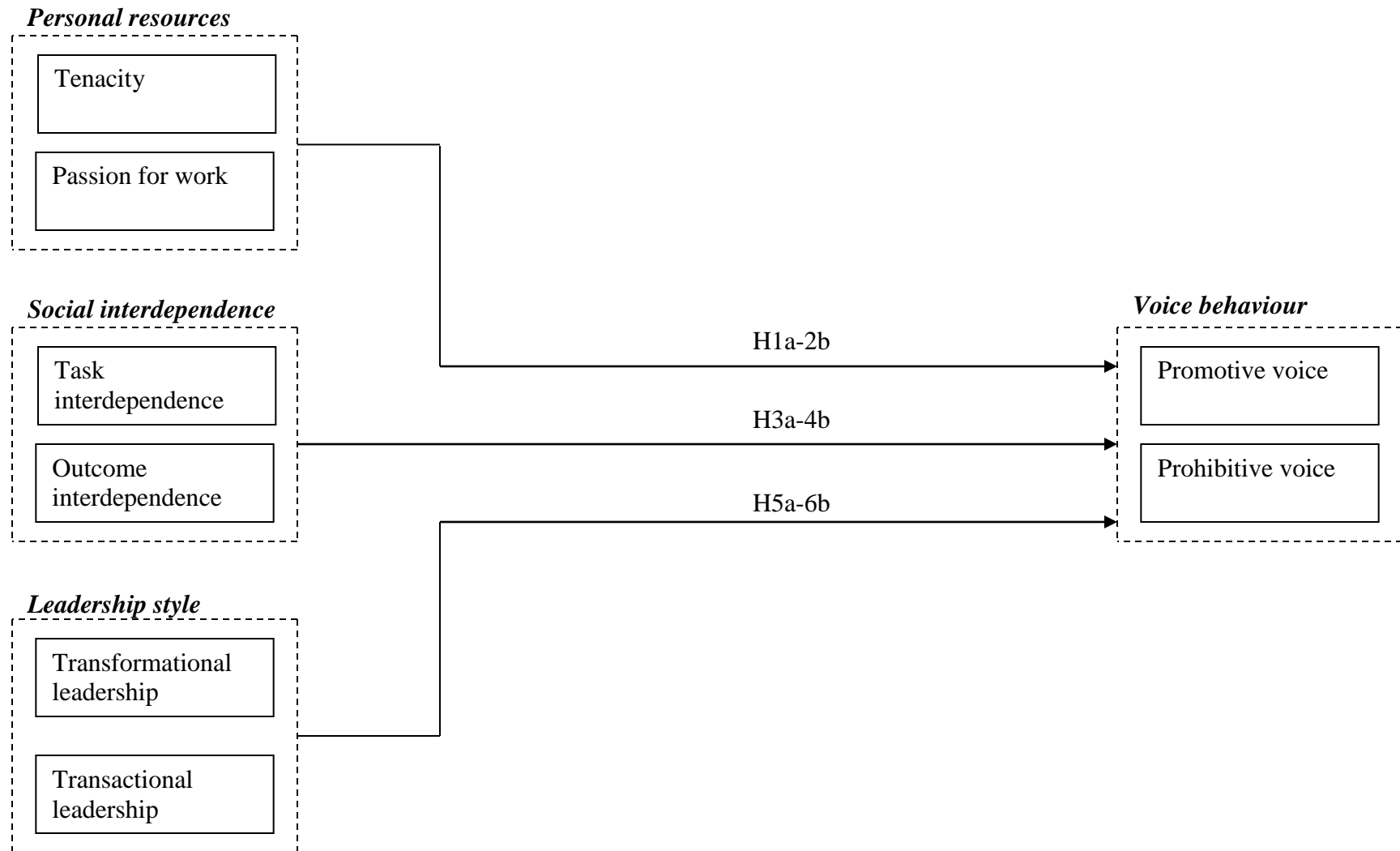
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**Figure 1: Conceptual framework**



**Table 1: Constructs and measurement items**

	<b>Factor Loading</b>	<b>t-Value</b>
<b>Voice behaviour</b> ( $\alpha = .958$ ; CR = .952; AVE = .669)		
This employee proactively develops and makes suggestions for issues that may influence his/her department/unit.	.871	--
This employee proactively suggests new projects which are beneficial to his/her department/unit.	.855	17.845
This employee raises suggestions to improve his/her department/unit's working procedures.	.952	22.723
This employee proactively voices out constructive suggestions that help his/her department/unit reach its goals.	.966	23.637
This employee makes constructive suggestions to improve his/her department/unit's operation.	.950	22.637
This employee advises other colleagues against undesirable behaviours that would hamper job performance.	.740	13.816
This employee speaks up honestly about problems that might cause serious loss to his/her department/unit, even when/though dissenting opinions exist.	.732	13.563
This employee dares to voice out opinions on things that might affect efficiency in his/her department/unit, even if that would embarrass others.	.610	10.422
This employee dares to point out problems when they appear in the unit, even if that would hamper relationships with other colleagues.	.656	11.511
This employee proactively reports coordination problems in his/her department/unit.	.755	14.265
<b>Tenacity</b> ( $\alpha = .731$ ; CR = .736; AVE = .415)		
I can think of many times when I persisted with work when others quit.	.667	6.537
I continue to work hard on tasks even when others oppose me.	.774	6.644
I work harder than most people I know.	.520	5.746
I do not give up when confronting challenging work situations.	.589	--
<b>Passion for work</b> ( $\alpha = .877$ ; CR = .883; AVE = .657)		
I look forward to returning to work when I am away from work.	.711	13.040
I love to work.	.881	19.348
I derive most of my life satisfaction from my work.	.680	12.037
I accomplish a lot at work because I love to work.	.940	--
<b>Task interdependence</b> ( $\alpha = .906$ ; CR = .907; AVE = .663)		
My own performance depends on receiving information and advice from my colleagues.	.688	--
I depend on my colleagues' input to do my job.	.822	11.328
I depend on my colleagues' help and support to do my job.	.875	11.908
I depend on my colleagues in order to be able to do my work well.	.864	11.724
My job performance is strongly affected by my colleagues' contributions.	.880	11.073
<b>Outcome interdependence</b> ( $\alpha = .772$ ; CR = .784; AVE = .510)		
It is beneficial for my colleagues when I excel in my work.	.948	--
It is to my colleagues' advantage when I perform well.	.894	13.517
My colleagues' goals are compatible with mine.	.440	5.968
It pleases me when my colleagues excel in their work.	.422	6.458
<b>Transformational leadership (behaviour-focused)</b> ( $\alpha = .921$ ; CR = .920; AVE = .564)		
My manager/supervisor articulates his/her vision clearly.	.762	10.230
My manager/supervisor is an ideal role model for employees.	.822	10.781
My manager/supervisor facilitates the acceptance of group goals (that go beyond individual ones).	.783	10.324
My manager/supervisor always considers my personal feelings before acting.	.712	9.698
My manager/supervisor shows respect for my personal feelings.	.722	9.749

My manager/supervisor challenges me to think about old problems in new ways.	.767	10.833
My manager/supervisor asks questions that prompt me to think about the way I do things.	.769	10.965
My manager/supervisor stimulates me to rethink the way I do things.	.762	10.868
My manager/supervisor challenges me to reexamine some of my basic assumptions about work.	.650	--
<b>Transformational leadership (performance-focused)</b> ( $\alpha = .810$ ; CR = .810; AVE = .590)		
My manager/supervisor insists on only the best performance.	.875	9.413
My manager/supervisor will not settle for second best.	.760	9.359
My manager/supervisor makes it clear that s/he expects that I give 110% all the time.	.653	--
<b>Transactional leadership (contingent rewards)</b> ( $\alpha = .951$ ; CR = .953; AVE = .871)		
My manager/supervisor always gives positive feedback when I perform well.	.867	22.821
My manager/supervisor gives special recognition when I perform well.	.958	34.114
My manager/supervisor commends me when I exceed my work goals.	.972	--
<b>Transactional leadership (contingent punishment)</b> ( $\alpha = .848$ ; CR = .861; AVE = .678)		
My manager/supervisor would indicate his/her disapproval if I performed at a low level.	.911	10.132
My manager/supervisor would point out to me if my performance was not satisfactory.	.895	10.196
My manager/supervisor would know about it when I perform poorly.	.636	--
<b>Organizational support for change</b> ( $\alpha = .887$ ; CR = .884; AVE = .658)		
Constructive ideas are encouraged in my department/unit.	.863	--
My department/unit is open to having its people come up with new suggestions.	.921	17.812
My department/unit is responsive to change.	.761	13.340
My department/unit can be described as flexible.	.677	11.012
Notes: Initial loading was fixed to 1 to set the scale of the construct. CR = construct reliability; AVE = average variance extracted.		

**Table 2: Test for discriminant validity**

		$\chi$ square		$\Delta\chi$ square
		Unconstrained	Constrained	
Voice behaviour	Tenacity	692.547	782.353	89.806**
	Passion for work	677.583	703.818	26.235**
	Task interdependence	713.884	863.080	149.196**
	Outcome interdependence	733.593	795.426	61.833**
	Transformational leadership (behaviour-focused)	1280.376	1347.075	66.699**
	Transformational leadership (performance-focused)	673.209	772.163	98.954**
	Transactional leadership (contingent rewards)	678.913	720.049	41.136**
	Transactional leadership (contingent punishment)	666.923	793.343	126.420**
	Organizational support for change	815.994	859.912	43.918**
Tenacity	Passion for work	57.044	70.491	13.447**
	Task interdependence	72.739	125.538	52.799**
	Outcome interdependence	45.515	202.834	157.319**
	Transformational leadership (behaviour-focused)	566.624	630.008	63.384**
	Transformational leadership (performance-focused)	11.276	84.185	72.909**
	Transactional leadership (contingent rewards)	18.133	68.266	50.133**
	Transactional leadership (contingent punishment)	15.616	115.058	99.442**
	Organizational support for change	180.291	232.646	52.355**
Passion for work	Task interdependence	84.412	90.884	6.472*
	Outcome interdependence	42.344	118.105	75.761**
	Transformational leadership (behaviour-focused)	576.699	587.288	10.589**
	Transformational leadership (performance-focused)	19.182	48.130	28.948**
	Transactional leadership (contingent rewards)	50.935	58.941	8.006**
	Transactional leadership (contingent punishment)	23.120	72.498	49.378**
	Organizational support for change	171.289	175.429	4.140*
Task interdependence	Outcome interdependence	100.700	139.432	38.732**
	Transformational leadership (behaviour-focused)	638.172	752.775	114.603**
	Transformational leadership (performance-focused)	61.260	161.660	100.400**
	Transactional leadership (contingent rewards)	45.108	141.789	96.681**
	Transactional leadership (contingent punishment)	51.560	195.538	143.978**
	Organizational support for change	202.288	288.265	85.977**

Outcome interdependence	Transformational leadership (behaviour-focused)	664.148	679.191	15.043**
	Transformational leadership (performance-focused)	68.822	85.718	16.896**
	Transactional leadership (contingent rewards)	72.282	96.550	24.268**
	Transactional leadership (contingent punishment)	80.582	132.342	51.76**
	Organizational support for change	218.955	231.028	12.073**
Transformational leadership (behaviour-focused)	Transformational leadership (performance-focused)	603.271	616.413	13.142**
	Transactional leadership (contingent rewards)	584.781	586.435	1.654
	Transactional leadership (contingent punishment)	588.219	646.826	58.607**
	Organizational support for change	763.296	772.198	8.902**
Transformational leadership (performance-focused)	Transactional leadership (contingent rewards)	25.110	45.700	20.590**
	Transactional leadership (contingent punishment)	23.216	49.578	26.362**
	Organizational support for change	157.677	177.183	19.506**
Transactional leadership (contingent rewards)	Transactional leadership (contingent punishment)	47.359	89.012	41.653**
	Organizational support for change	155.871	160.104	4.233**
Transactional leadership (contingent punishment)	Organizational support for change	158.100	215.746	57.646**

Note: \*  $p < .05$ ; \*\*  $p < .01$

**Table 3: Descriptive statistics and correlations**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Voice behaviour														
2. Tenacity	.190**													
3. Passion for work	.206**	.527**												
4. Task interdependence	-.040	.137*	.249**											
5. Outcome interdependence	.006	.131*	.252**	.531**										
6. Transformational leadership (behaviour-focused)	.033	.225**	.373**	.244**	.222**									
7. Transformational leadership (performance-focused)	-.183**	.102	.120	.214**	.233**	.385**								
8. Transactional leadership (contingent rewards)	-.028	.106	.250**	.020	.117	.512**	.127							
9. Transactional leadership (contingent punishment)	-.174**	.100	.113	.086	.201**	.215**	.380**	.149*						
10. Gender	.037	.068	.152*	-.072	-.014	.130	.003	.113	-.043					
11. Age	.214**	.100	.096	-.161*	-.039	.011	-.108	.106	.059	.169*				
12. Education	.257**	-.004	-.041	.018	-.009	-.078	-.073	-.105	-.087	-.161*	-.186**			
13. Organizational tenure	.101	.170*	.061	-.067	.022	.099	.075	.123	.087	.177**	.591**	-.298**		
14. Organizational support for change	.102	.196**	.341**	.255**	.326**	.490**	.271**	.297**	.128	.039	.052	-.028	.099	
Mean	5.219	5.165	4.784	4.369	5.636	5.235	5.208	5.355	5.583	0.843	46.909	2.391	14.303	5.323
Standard deviation	1.116	0.960	1.344	1.456	1.055	1.143	1.215	1.609	1.161	0.365	10.851	0.795	11.555	1.283
Minimum	1.500	2.250	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	20.000	1.000	0.000	1.000
Maximum	7.000	7.000	7.000	7.000	7.000	7.000	7.000	7.000	7.000	1.000	67.000	4.000	51.000	7.000

Notes: n = 226; \* p &lt; .05; \*\* p &lt; .01

**Table 4: Regression results (Dependent variable = voice behaviour)**

	Voice		Promotive voice	Prohibitive voice
	Model 1	Model 2	Model 3	Model 4
Gender	.036	-.087	-.045	-.129
Age	.025**	.019*	.014	.023*
Education	.386***	.344***	.247*	.442***
Organizational tenure	.001	.007	.007	.007
Organizational support for change	.102 <sup>+</sup>	.099	.113	.085
H1: Tenacity		.066	.058	.073
H2: Passion for work		<b>.165*</b>	<b>.169*</b>	<b>.161*</b>
H3: Task interdependence		-.014	-.056	.027
H4: Outcome interdependence		-.006	.049	-.062
H5: Transformational leadership (behaviour-focused)		.062	.043	.080
H5: Transformational leadership (performance-focused)		<b>-.133*</b>	<b>-.136<sup>+</sup></b>	<b>-.130<sup>+</sup></b>
H6: Transactional leadership (rewards)		<b>-.091<sup>+</sup></b>	-.063	<b>-.118*</b>
H6: Transactional leadership (punishment)		<b>-.161*</b>	<b>-.153*</b>	<b>-.169*</b>
	R <sup>2</sup>	.141	.252	.196
	ΔR <sup>2</sup>		.111***	.253

Notes: n = 226; <sup>+</sup> p < .10; \* p < .05; \*\* p < .01; \*\*\* p < .001 (two-tailed tests)